PHILOSOPHICAL TRANSACTIONS.

May 22. 1676.

The CONTENTS.

Two Inſtances of ſomething very remarkable in Shining Fleſh, *from Dr.* J. Beal. *A Diſcourſe concerning the* Spiral, *inſtead of the hitherto ſuppoſed* Annular, *ſtructure of the Fibres of the Inteſtins; diſcover'd and ſhewn by Dr.* William Cole *to the* R. Society. *Monſieur* Bullialdus *and Monſieur* Richelt's *account of the Lunar Eclipſe of* Januar. 1. 1676. ſt. novo. *An Account of five Books: I.* Nic. Mercatoris *INSTITUTIONUM ASTRONOMICARUM Libri duo*, &c. *II. Obſervations ſur les EAUX MINERALES de pluſieurs Provinces de* France, *faites en l'*Academie Royale *des Sciences à* Paris *par le Sieur* du Clos, *&c. III. COCHLEARIA CURIOSA, written in Latin by Dr.* Molimbrochius, *and Engliſh'd by Dr.* Sherly. *IV. Two Treatiſes; the one, Medical, of the GOUT, by* Herman Buſchof; *the other, partly Chirurgical, partly Medical, concerning ſome Extraordinary* Caſes of Women in travel, *and ſome other uncommon Caſes of Diſeaſes in both Sexes, by* Henry van Roonhuyſe: *Engliſh'd out of Dutch. V. New and Curious Obſervations of the Art of curing the* Venereal Diſeaſe: *Engliſh'd out of French by Dr.* Walt. Harrys.

Two Inſtances of ſomething Remarkable in Shining Fleſh, *from Dr.* J. Beal *of* Yeavel *in* Somerſetſhire, *in a Letter to the Publiſher.*

SIR,

AFter you have been tired with the noiſe of a piece of Freſh Beef, which ſhined in the *Strand* in *London*, within few hours after it was bought in the Market; it may ſeem ſuperfluous, or tedious, to diſcourſe more of ſuch matters. But for ſomething, which I have not ſeen formerly remarked, and which fell out in this Town, and in the Houſe where I dwell, within my own knowledg, I ſhall give you the Inſtances, as briefly as I can.

1. Upon Friday (*Febr.* 25. 1675.) a Woman of this Town, bought in the Market a Neck of *Veal*, which ſeemed well coloured, and well conditioned in every reſpect: The Calf, a cow-calf, was killed in the evening the day before; it was hung to a Shelf in a little Chamber, where ſhe and her Husband lay: Upon the following Saturday, about 9 in the night, the Neck of Veal ſhined ſo bright, that it did put the Woman into a great affrightment. She calls up her Husband; he haſtens to the Light, as fearing fire and flames, and ſeeing the light come only from the Fleſh, he caught the Fleſh in his left hand, and beat it with his right hand, as endeavouring to extinguiſh the flame, but without effect. The Fleſh ſhined as much, if not more, than before, and his hand, with which he did beat the Fleſh, became all in a flame, as bright, and vivid, as the Fleſh of the Veal was, and ſo it continued, whilſt he went from place to place, ſhewing it to others. Then he thruſts his blazing hand into a pail of pure water; this could not extinguiſh the flame at all, but his hand ſhined through the water: at laſt he took a napkin, and wiped his hand, till he wiped off all the Light. The next day (being *Febr.* 27.) the Veal was dreſſed, and ſome of the Neighbours, who ſaw it ſhining, were invited to eat of it; all eſteemed it as good, as any they had eaten. A part of it was kept for *Febr.* 28, and 29. in which time it loſt nothing of its ſweetneſs. Other circumſtances I omit for brevity.

2. And now I want not a parallel in conſort for that part of this Relation, which ſeemeth ſtrangeſt: For on Tueſday (being *Apr.* 4. 1676.) a fat Pork was killed for my Family; within two days, the Guts, or (as ſome call them) the *Chitterlings*, and feet of the Pork were boyled, and after they were throughly cold, they were put, in due order, in ſouſe-drink, or pickle, in a low room, on the North-ſide, which had little light at mid-day, and was very dark, as ſoon as night began. *Apr.* 8. all thoſe parts of the guts, and the claws of the feet, which floated on the top of the pickle, began to ſhine, and the parts immerſed under water gave no light; the light increaſed daily more and more in all the parts that floated. *Apr.* 13. the light ſeem'd as bright as the brighteſt Moon-ſhine; thus it continued to ſhine (but fainter and fainter, and in fewer parts) almoſt a week longer; for, being often tumbled up and down, by ſlow degrees all ſunk into the pickle, and then all the light expired. Whilſt the light was vivid, I caus'd a Maid-ſervant to rub one of her hands upon the ſhining part; after which, ſhe came through three rooms, into

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the place where I ſate, between a great fire on one ſide, and a candle or two on a Table near at hand, on the other ſide; and in this place ſhe ſhew'd me her hand, all over ſhining, as bright as Moon-ſhine; one indeed ſtood between her hand and the fire, another between her and the candles. Thence I went into another room, where there was but a ſmall fire, and no candle, but (at that time) a little Moon-ſhine through a window, there the ſhining parts of her hand, or indeed her hand all over appear'd to me very bright flames. Then I cauſed ſome of the ſhining Pork to be brought into the ſame room, and examined, whether the pickle did not ſhine, and ſo might give the flaming tincture to the Maids hand; but by wiping the Pork diligently with a napkin, till it was perfectly dryed, we found, that the flame of the Pork was rather increaſed, (as we all thought) than diminiſhed. Then I deſired all the company, (whereof ſome were young children, which have the tendereſt touch) to try, whether the moſt flaming parts had any perceptible degree of tepidity; all agreed, that they could feel no warmth. But I continued to direct them all to compare the dark parts with the moſt luminous, by that part of their fore-fingers, which hath the moſt tender perception; after 3 or 4 trials, all agreed ſtill, that all parts of the Pork were manifeſtly gelid; but ſome thought, they perceived the luminous parts leſs gelid than the dark parts, others denied it: for my own part, I found not ſo much difference, as could clear me from ſuſpecting a prepondering fancy. After theſe Tryals, the Maid wiped off the light from her hand, by rubbing her hand ſtrongly with a napkin, three or four times over.

3. Then I ſuffer'd my Servants to call in ſeveral Neighbours to ſee it, night after night, and particularly the Mother and Siſter of the Woman, which had the ſhining Veal. This I did partly to prevent, that they might not raiſe ſtories of Ghoſts in my Houſe; yet ſome were forward at it. If we had had a mind to act Pageantries, or to ſpread a ſtory of Goblins, you ſee how eaſily it might have been done, by ſmearing ones hands and face all over with the tincture of light, which adhered ſo permanently. And beſides, I noted, that by this acquired blaze, the face and hands would appear a great deal larger than they were, and the manner how it was done being concealed, the learned and ingenious might be at a loſs to diſcover what it might be.

4. If others think fit to vilifie theſe Obſervations, yet I muſt acknowledg, That I never heard nor read of the like, till Honourable

Mr. *Boyle* was pleas'd to oblige us with an accurate accompt of a Neck of Veal, and a Pullet, which were luminous, as you have publiſhed it in N. 89. of your Tracts, *p.* 5107. Hiſtories report of a ſuddain and ſhort fulgor about the countenance of the *living*, which they interpreted to preſage ſomething extraordinary, by which thoſe perſons became Illuſtrious; but of *dead carkaſſes*, which became thus luminous, I have read nothing in old Records. That Mackrels, in their pickle, did caſt a ſhining blaze, ſome days before they were ill taſted, or ill ſented, I gave you notice *May* 5. 1665. as 'tis in your *Firſt Vol. n.* 13. *p.* 226. Since which time I tryed often to obtain the like, but without ſucceſs, though I know not what circumſtance was wanting. The pickle in which the Pork was put, was made only of pure Water, Bran, and bay-Salt, and was far from ſhining: It quencht the light by degrees of the ſhining Fleſh. The Mackrel-pickle (which was boyl'd with a mixture of ſweet herbs) by a little ſtirring became ſo luminous, that a drop of it in the palms of childrens hands appeared as broad as a ſhilling, or broader, ſo that a waſh of it might too fitly ſerve for Impoſture.

5. For the difficulty of obtaining the ſame, and for many other conſiderables, I refer to Mr. *Boyle*'s Pneumatical Experiment 37. by him obſerv'd about 18 years ago. And I think, ſhining *Worms* are ſeldom found in Oyſters, as was obſerv'd by Monſieur *Auzout*, in your *n.* 12. *p.* 203. And perhaps one may wait a long day, before he ſhall ſee ſuch a long-laſting Light in the *Iriſh* Seas, as was remarked in your *Vol.* 9. *n.* 111. *p.* 240. So that I cannot wonder, if expert Chymiſts do by ſome Chance obtain more, than by Art and much diligence they can repeat again, ſince they deal with ſuch fickle agents, as Fire and Flame. I have heard of ſome Dews on Meadows, ſhining in the early morning, before day-light; but thoſe more frequently. Theſe and much better, ſome of Mr. *Boyle*'s Inſtances in your forementioned *Experiment* 37. and more in his Diſcourſe of Luminous Gems at the end of his elaborate *Treatiſe of Colors*, may, at leaſt, by reſemblances, inſtruct us to apprehend the nature of ſome ſhining Meteors among the Clouds, or in our lower Region, of which, they ſay, ſome have a ſinging heat, and do blaſt, and that ſome are to the touch gelid, yet do poyſon or corrupt our fleſh. And I have read in our Chronicles, That in *England*, for many days together, there hath been a fiery incaleſcence with light, as if all the air had been in a flame. Thus we have flaming Air, and flaming

ming Water, in Seas, and in Clouds, and in Pickle; yet not ſo frequent, as to eſcape always the ſuſpicion of being Prodigies. But in the foreſaid references more is ſaid of Light, than I am able to expreſs; I ſhall only add, That I gave full warning to obſerve, whether the Light in my two Inſtances had any blewiſh or greeniſh tincture; all that ſaw both, affirmed the Light to be as clear as the brighteſt Moon-ſhine, and ſo it appeared to my own eyes; and I can perfectly remember, that I really thought the beams which came from the Mackrel, and the ſtirred pickle, to be bright Moon-ſhine, till a Servant brought me to the Veſſel, to ſee the contrary.

Poſtſcript. We had the report here (whether true or falſe, you may beſt know) of the ſhining Beef in the *Strand*, about the ſame time, when the Neck of Veal, firſt mention'd, ſhined here. And it was here obſerved, That the Stars had that night a glaring brightneſs and largeneſs, more than ordinary, and for ſome moneths before, and ever ſince, the weather hath been more gentle, warm, and dry, than is uſual in thoſe months; but 'tis above my skill to demonſtrate, how this belongs to the matter in hand. Note, that the Mackrel-pickle was thick and not tranſparent, till it was ſtirred and flaming; the Pork-pickle was clear, or tranſparent, yet ſhined not in any part.

A Diſcourſe concerning the Spiral, *inſtead of the ſuppoſed* Annular, *ſtructure of the Fibres of the Inteſtins; diſcover'd and ſhewn by the Learn'd and Inquiſitive Dr.* William Cole *to the* R. Society.

DIſcourſing (near two years ſince) with a very ingenious Perſon, concerning the Mechanical reaſon of the *Periſtaltick* motion of the Inteſtines, which is by Anatomiſts deduced principally from *Annular* fibres, conſtituting, according to the received doctrine (with the right fibres immediately inveſting them, though, by the by, I take theſe to make a diſtinct coat) one of the coats of them; his ſence was (which he told me was that likewiſe of ſome others of his acquaintance) that they might be rather numerous, though ſmall, Sphincter-muſcles, than ſingle fibres, to which that motion is to be attributed; Muſcles being in moſt, if not all, other inſtances owned to be the adequate inſtruments of motions analogous to this; and fibres, though abſolutely neceſſary, yet being no otherwiſe ſo, than as (a number of them being collected, and fitly diſpoſed) they conſtitute a Muſcle.

The Conjecture ſeemed to me more probable than the vulgarly received